Respirator Protection

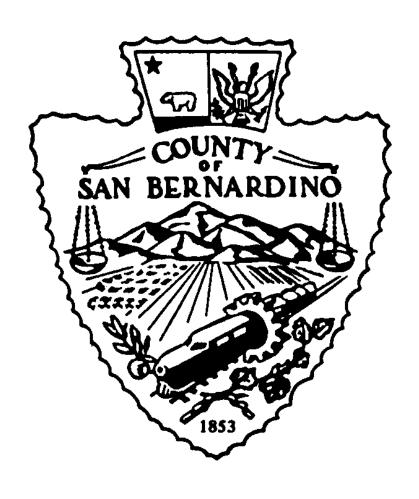


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County of San Bernardino

RESPIRATOR PROTECTION PROGRAM

SCOPE

This program establishes San Bernardino County procedures for the use of respirators. It provides information and guidance on selection, use and care of respirators. It also contains requirements for establishing and regulating departmental respirator programs. The program identifies documentation, communication, and training necessary to ensure the health and safety of County employees. This procedure sets forth minimum standards for all County departments. Individual departments may implement more stringent standards. Copies of department prepared programs are to be provided to Risk Management Division/Safety Section upon request, as well as included in the immediately following divider labeled "Department Program".

PURPOSE

Title 8, California Code of Regulations, General Industry Safety Orders, Section 5144 requires that when it is clearly impracticable to remove harmful dusts, fumes, mists, vapors or gases at their source, an employer shall provide, and the employee exposed to such hazard shall use, approved respirator equipment. Compliance with the regulation requires an employer to implement an effective program. Section 3203 of the above referenced Code requires California employers to prepare written programs relative to the prevention of occupational illness/injurious exposure and use of personal protective equipment.

MINIMUM REQUIREMENTS FOR RESPIRATOR PROGRAM

 Accepted engineering control and/or administrative control measures shall be instituted before respirators are considered (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials).

- When engineering controls or administrative controls do not satisfactorily reduce exposure levels written standard operating procedures (SOP) governing the selection and use of respirators shall be prepared and implemented;
- Respirators are to be selected on the basis of hazards to which workers are exposed;
- 4. A respirator user shall be trained in the use of respirators and in their limitations;
- 5. Except for emergency escape respirators, all respirators shall be assigned to individual workers for their exclusive use;
- Respirators shall be regularly cleaned and disinfected. Those emergency escape repirators used by more than one worker shall be thoroughly cleaned and disinfected after each use;
- 7. Respirators shall be stored in a convenient, clean and sanitary location;
- 8. Respirators shall be inspected during cleaning. Worn or deteriorated parts shall be replaced. Respirators for emergency use, such as self-contained breathing apparatus (SCBA), and emergency escape respirators shall be thoroughly inspected at least once a month as well as after each use:
- Appropriate surveillance of work area conditions and degrees of employee exposure or stress shall be conducted at least once every three (3) months in all areas where the level of toxic exposure required preparation and implementation of a written respirator program.
- 10. There shall be regular inspections and evaluations to determine the continued effectiveness of the written program;
- Persons shall not be assigned to tasks requiring use of respirators unless it has been determined that they are physically

able to perform the work and use the equipment. Only employees who have been examined, and who have been found fit by the Center for Employee Health and Wellness (CEHW), shall be permitted to wear respiratory protective equipment. The respirator user's medical status shall be reviewed periodically, at least annually;

- 12. Only approved or accepted respirators shall be used;
- 13. Employees shall use respirators as directed by supervisory personnel are accountable for assuring employees follow the directives of the written program.

RESPONSIBILITIES

A. IN GENERAL

- Each department that requires use of respirators shall appoint a Respirator Program Administrator (RPA) to monitor respirator use and coordinate training. The Respirator Program Administrator (RPA) shall be the liaison between the department and the County Safety Officer.
- Each department Respirator Program
 Administrator shall receive training
 prior to assumption of RPA duties.
 RPA training shall be arranged through
 Risk Management Division/Safety
 Section.
- No employee shall be issued a respirator unless it has been determined by the RPA that engineering controls and/or administrative controls are ineffective and respirators are needed.
- County employees who wear a respirator shall conform to all requirements set forth in Title 8 California
 Code of Regulations, Section 5144.

B. RESPIRATOR PROGRAM ADMINISTRATOR

1. Ensure the purchase of required approved respiratory protective devices for each departmental user.

- 2. Ensure respirator users are medically cleared through the CEHW in accordance with this policy.
- 3. Ensure an inventory is maintained, including spare parts (cartridges, etc.), of new equipment ready for issue.
- 4. Assist users in selection of the proper type respiratory protection for anticipated hazard exposure.
- 5. Schedule the necessary training for employees in the correct use, maintenance, cleaning and care of respiratory protective devices.
- Schedule and complete a Qualitative or Quantitative Respiratory Fit Test for all respirator users within his or her area of responsibility.
- 7. Periodically evaluate the effectiveness of the program with the County Safety Officer.
- If self-contained breathing apparatus (SCBA) are used, perform monthly inspections of equipment, ensuring that the regulator and warning devices function properly, and that the cylinders are D.O.T. approved and filled to capacity.
- If emergency escape respirators are used or available in the workplace, perform and document monthly inspections of the equipment to assure it is being maintained in proper condition.
- 10. Maintain all records associated with the program.

C. RESPIRATOR USER

- Maintain appropriate personal hygiene so as not to interfere with the seal of the respirator.
- Properly maintain personally assigned respirator equipment including cleaning/disinfecting, inspection, and storage. All respiratory protective equipment shall be maintained to retain original effectiveness.

- Respiratory protective devices will be worn by employees during the course and scope of employment where the RPA has determined a need exists.
- Respirator malfunctions and/or physical defects shall be reported to the RPA for remedy. The RPA will be informed when additional respirator cartridges are needed for personally assigned respirators.

SELECTION AND USE OF RESPIRATORS

A. DISTRIBUTION

- The RPA shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and other factors that affect respirator performance and reliability.
- 2. The RPA shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.
- The RPA shall identify and evaluate and provide the information to CEHW respiratory hazard(s) in the workplace: this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the RPA cannot identify or reasonably estimate the employee exposure, the RPA shall contact Risk Management Safety Section for consultation and should consider the atmosphere to be immediately dangerous to life or health (IDLH) until otherwise classified.
- 4. The RPA shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user. The Assigned Protection Factors (APFs) and Maximum Use Concentration (MUC) must be reviewed in the selection process.
- 5. Based upon a fit test, each user shall be issued the appropriate respirator.

- The RPA shall record the date of qualitative/quantitative fit test, and type and date of respirator issuance for each user. This record will be maintained as part of the program file to be available for inspection.
- Except for emergency escape respirators all respirators shall be assigned to individual workers for their exclusive use.
- 7. In the event of an injury or illness which may alter the features of the face, extraction of teeth, use/removal of dentures, or change in the face brought about by diet, aging, or growth of facial hair, another fit test must be performed to determine if the previously assigned respirator is still adequate. The RPA shall assure all fit tests are performed in accordance with this policy.

B. SELECTION OF RESPIRATOR

An RPA shall determine the proper approved respirator and canisters or cartridges required for particular hazards anticipated. The following questions should be addressed in order to select the proper respirator for specific hazardous exposures:

- Assigned Protection Factors (APFs) shall be taken into account as they relate to the level of contaminants and the Maximum Use Concentration (MUC) must be considered as part of the selection process.
- 2. The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.
- 3. For protection against gases and vapors, the RPA shall provide:
 - a. An atmosphere-supplying respirator, or
 - b. An air-purifying respirator, provided that:
 - The respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or

- ii. If there is no ESLI
 appropriate for conditions
 in the workplace, the
 workplace, the RPA shall
 implement a change
 schedule for canisters
 and cartridges that is
 based on
- iii. objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. The RPA must describe in the department respirator program the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data.
- c. For protection against particulates, the RPA shall provide:
 - i. An atmosphere-supplying respirator; or
 - ii. An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or
 - iii. For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an airpurifying respirator equipped with any filter certified for particulates by NIOSH.
- 4. The RPA shall consider the toxicological data that may be available.
- The RPA shall consult product Material Safety Data Sheets (MSDS) for respiratory protection recommendations during product use, and have MSDS provided to CEHW.

- S. Knowledge of the warning properties of contaminant breakthrough. Adequate warning properties can be assumed when odors, taste or irritation effects of a substance are detectable or persistent at concentrations below or at the permissible exposure limits/levels (PEL).
- Determination whether the substance encountered may irritate and/or damage the eye. If so, appropriate goggles or full face respirators in compliance with ANSI Z87.1 must be used.
- 8. When there is doubt as to the concentration of oxygen or hazardous material present in the atmosphere, only those respirators listed as suitable for respiratory protection in oxygen deficient atmospheres shall be used. Any erring in the selection of respirators shall be on the safe side.

C. SELECTION OF RESPIRATOR IN FIREFIGHTING AND/OR IDLH CONDITIONS

For all immediately dangerous to life or health (IDLH) atmospheres, the written program shall ensure that:

- One employee or, when needed, more than one employee is located outside the IDLH atmosphere;
- Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;
- The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;
- The department head or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue;
- 5. The department head or designee provides necessary assistance appropriate to the situation;

- 6. Employee(s) located outside the IDLH atmospheres are equipped with:
 - a. Pressure demand or other positive pressure SCBA's, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either
 - b. Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or the requirements of Section D below.

D. PROCEDURES FOR INTERIOR STRUCTURAL FIREFIGHTING

In addition to the requirements set forth under C immediately above, in interior structural fires, the RPA shall ensure that:

- At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times:
- 2. At least two employees are located outside the IDLH atmosphere; One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident; and
- 3. All employees engaged in interior structural firefighting use SCBAs.

Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

Nothing in this section shall be interpreted as to modify the responsibilities of a permit required confined space attendant as defined by Title 8, CCR, Section (5159),

when employees are working under the provisions this standard.

E. INSTRUCTION AND TRAINING

All respirator users will attend an instructional training class on occupational respiratory protection. This course shall provide training in the proper selection, maintenance, care, storage, and cleaning of respirators, as well as training in positive and negative pressure facepiece fitting tests. During this class, there will be "hands on" training as well as an explanation of the following:

- The nature of respirator hazards and what may occur if a respirator is not properly used.
- 2. Reasons for selection of a particular type of respirator.
- 3. Limitations of selected respirators.
- 4. Methods of donning respirators and checking fit and operation.
- 5. Proper wearing of the respirator.
- 6. Respirator maintenance.
- 7. Recognition and procedures for handling emergency situations.
- 8. Recognition of medical signs and symptoms that may limit or prevent the effective use of respirators.

Each department RPA shall conduct refresher training sessions semi-annually, covering at a minimum the following:

- 1. Positive and negative pressure facepiece fitting tests.
- If applicable, proper operation of selfcontained breathing apparatus (SCBA) and tests which determine proper function of regulator and warning device.
- Standard respirator inspection which includes a check of tightness of connections and the condition of the facepiece, headbands, valves, connecting tube and canisters/cartridges, pliability of rubber

or elastomer parts, as well as signs of possible deterioration.

Each department RPA shall provide individual training to users upon request. Retraining shall be administered when changes in the workplace or the type of respirator render previous training obsolete.

All employee training shall be documented.

F. CLEANING AND DISINFECTION

Each user is responsible for cleaning a SCBA, supplied air respirator, or powered air purifying respirator if used. The respirator and accompanying parts (i.e., supplied or powered air hose assemblies) shall be cleaned after each day's use, or more often if needed. Those respirators used by more than one individual shall be thoroughly cleaned and disinfected after each use.

- The procedures below will be followed when cleaning and disinfecting respirators:
 - Remove any filters, canisters or cartridges, headstraps and valve covers.
 - b. Wash facepiece and breathing tube in cleaner/disinfectant.
 - c. Rinse completely in clean, warm water.
 - d. Air dry in clean area.
 - e. Clean other respirator parts as recommended by the manufacturer.
 - f. Inspect valves, headstraps, etc., for defects. If defective parts are found, this must be brought to the attention of the department RPA representative to facilitate replacement of the defective element. Respirators with defective parts are not to be used under any circumstances.
 - g. Insert new filters, canisters or cartridges, making sure seal is

tight. In cases where a self-contained breathing apparatus has been used, it is the responsibility of the RPA to ensure cylinders are recharged to full capacity. In those cases where a powered air purifying respirator has been utilized, the RPA shall ensure the full recharging of the battery pack.

2. Precautions.

- a. Strong cleaning and disinfecting agents can damage respirator parts. Temperatures above 140 degrees Fahrenheit and vigorous mechanical agitation should not be used. Solvents which affect elastomer or rubber parts shall be used with extreme caution.
- Respirators may become contaminated with toxic materials.
 In such cases, a new respirator shall be provided the employee and the RPA shall ensure thorough decontamination of the used respirator.

G. STORAGE

- Respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture or damaging chemicals.
- 2. Users shall store respirators in clean plastic bags.
- 3. Respirators shall not be kept in areas subject to extreme temperature changes.
- Respirators shall be stored so the facepiece and exhalation valve rest in a normal position. This will ensure function is not impaired by elastomer setting in an abnormal position.

H. FIT TESTING

Effectiveness of the facepiece fit of a respirator can be tested two ways - - qualitatively and quantitatively. Fit testing is

required before a respirator is issued to the employee. Fit testing protocol in accordance with the manufactures recommendations and CFR 1910.134 shall be followed.

- Qualitative fit testing involves the introduction of a harmless odorous or irritating substance into the breathing zone of the wearer. Non-detection of the substance indicates proper fit.
- Quantitative fit testing offers the most accurate, detailed information on respirator fit. It involves the introduction of a harmless aerosol to the wearer while he or she is in a test chamber. While the wearer performs exercises which could induce facepiece leakage, the air inside and outside the facepiece is then measured for the presence of the harmless aerosol.

I. INSPECTION AND EVALUATION OF PROGRAM

Program improvement and elimination of deficiencies cannot be effected unless the program is monitored and evaluated on a timely basis. The RPA shall employ the following techniques to evaluate effectiveness of the respirator program on a quarterly basis:

- Random inspection of respirator condition. Ensure required respirator records and inspections are up to date.
- Perform qualitative fit tests on users of respirators at least annually as part of continued program maintenance. This test shall be accomplished by introducing a harmless odorous or irritating substance into the zone of the wearer.
- 3. Complete surveillance of work area conditions and degree of user exposure. During the course of the year, when the RPA observes users at work, a determination shall be made on user's proficiency when working with a respirator. The RPA shall also determine whether a respiratory protective device was selected and used properly, depending

on the industrial and/or environmental exposures observed.

J. MEDICAL STATUS AND ANALYSIS

Persons assigned to tasks which require use of respirators must be physically able to perform while using a respirator. A respirator user's medical status must be reviewed annually.

When respirators are worn in toxic atmospheres, the user shall be provided appropriate laboratory tests. These tests may include urine, blood or fecal analysis, and other techniques to determine intake and excretion of toxic substances. The findings of these tests, when correlated with other exposure data, such as air sampling data for wearers of such equipment, are an indication of the effectiveness of the Respiratory Protection Program. Any positive evidence of exposure shall be investigated to determine if there may be inadequate respirator protection or a need for additional engineering or administrative controls.

In determining the medical condition of an employee the RPA shall institute the following procedures in conjunction with the Medical Director.

- A medical evaluation to determine the employee's ability to use a respirator shall be conducted before the employee is fit tested or required to use the respirator in the workplace.
- The medical evaluation shall consist of the information requested by medical questionnaire obtainable from the Safety Officer.
- 3. The RPA shall provide the questionnaire to the employee and instruct the employee to send the questionnaire to:

Center for Employee Health and Wellness Medical Director Respiratory Protection Evaluations 555 North D Street #100 San Bernardino, CA 92415

4. The RPA shall ensure that a follow-up medical examination is provided upon request the Medical Director

- The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the Medical Director deems necessary to make a final determination.
- 6. The medical questionnaire and examinations shall be administered confidentially during the employee's normal working hours. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content.
- 7. The CEHW shall provide the employee with an opportunity to discuss the questionnaire and examination results.

The CEHW shall be provided the Respirator Use Form Medical Questionnaire located on page 64 of the program by the RPA before a recommendation concerning an employee's ability to use a respirator:

- 1. The type and weight of the respirator to be used by the employee;
- The duration and frequency of respirator use (including use for rescue and escape);
- 3. The expected physical work effort;
- 4. Additional protective clothing and equipment to be worn;
- 5. Temperature and humidity extremes that may be encountered; and
- 6. MSDS, name of contaminants, hazardous substances and physical form of chemical.

In determining the employee's ability to use a respirator, the RPA shall:

- Obtain a written recommendation regarding the employee's ability to use the respirator from the CEHW. The recommendation shall provide only the following information:
 - a. Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will

- be used, including whether or not the employee is medically able to use the respirator;
- b. The need, if any, for follow-up medical evaluations; and
- c. A statement that the CEHW has provided the employee with a copy of the written recommendation.
- 2. If the respirator is a negative pressure respirator and the CEHW finds a medical condition that may place the employee's health at increased risk if the respirator is used, the County shall provide a Powered Air Purifying Respirator if the CEHW medical evaluation finds that the employee can use such a respirator; if a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the County is no longer required to provide a Powered Air Purifying Respirator.

The RPA shall provide additional medical evaluations that comply with the requirements of this section if:

- An employee reports medical signs or symptoms that are related to the ability to use a respirator;
- 2. The CEHW, supervisor, or the respirator program administrator suspects that an employee needs to be reevaluated;
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
- 4. A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

K. RECORDS

The following records are to be maintained by the departmental RPA:

- Monthly inspection of self-contained breathing apparatus (SCBA), including a check of the regulator and warning device.
- The date of user respirator device quantitative fit test, type of approved respirator, date of ordering the respirator, date of issuance of the respirator. Records are to be maintained for each user.
- Record of employee training, dates, description of agenda, and roster of those participating.
- Record of date and condition of user's respirator inspected on a random basis, performed randomly at least four times per year.
- 5. Annual record of date and results of qualitative fit tests.
- Monthly record of supplies (i.e., cartridges, canisters, headstraps, etc.), date of SCBA cylinder refill and/or powered air purifying respirator battery back recharge, if applicable.

safety/docs/sftymnl/MASTER/respiratory policy1.doc

RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

| NA | ME: | DOB: | | 1 | SSN | | | | |
|------------|---|--|--------|------------|-------------|------------|-----------|--------|-------|
| <u> Pa</u> | rt A. Section 1 (Mandatory): | | | | | | | | |
| | e following information must be proving respirator (please print). Today's date: | | mploye | ee who h | as been s | elected | to use | any | type |
| 2. | Your name: | | | | | | | | |
| | Your age (to nearest year): | | | | | | | | |
| 4. | Sex (circle one): Male or Female | | | | | | | | |
| 5. | Your height:ftin. | | | | | | | | |
| 6. | Your weight:lbs. | | | | | | | | |
| 7. | Your job title: | ere en | | | | | | | |
| 8. | Check the type of respirator you wi | ll use (you can • | / mor | e than or | ne catego | ·y): | | | |
| | aN, R, or P disposable | e respirator (filte | r-mas | k, non-ca | rtridge typ | e only). | | | |
| | bOther type (for exam | ple, half-or full-f | ace pi | ece type, | powered | l-air puri | ifying, s | supp | lied- |
| | air, self-contained br | eathing appara | tus). | | | | | | |
| 9. | Have you worn a respirator (circle o | one): | Yes | or No | | | | | |
| | If "yes," what type(s): | | | | | | | | |
| <u>Pa</u> | rt A, Section 2 (Mandatory): | | | | | | | | |
| | restions 10 through 18 below must by type of respirator (please circle "ye | | every | employe | e who has | s been s | elected | l to ι | use |
| 10 | . Do you currently smoke tobacco, o | r have you smo | ked to | bacco in | the last r | nonth: | Yes | or | No |
| 11 | . Have you ever had any of the follow | wing conditions? | ? | | | | | | |
| | a. Seizures (fits): | | | | Yes | No | | | |
| | b. Diabetes (sugar disease): | | | | Yes | No | | | |
| | c. Allergic reactions that interfe | ere with your bre | athing | ; : | Yes | No | | | |
| | d. Claustrophobia (fear of close | ed-in places): | | | Yes | No | | | |
| | e. Trouble smelling odors: | | | | Yes | No | | | |
| 12 | . Have you ever had any of the follow | wing pulmonary | or lun | g proble | ms? | | | | |
| | a. Asbestosis: | Yes | No | | | | | | |
| | b. Asthma: | Yes | No | | | | | | |
| | c. Chronic bronchitis: | Yes | No | | | | | | |
| | d. Emphysema: | Yes | No | | | | | | |
| | e. Pneumonia: | Yes | No | | | | | | |
| | f. Tuberculosis: | Yes | No | | | | | | |
| | g. Silicosis: | Yes | No | | | | | | |

RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

| | h. Pneumothorax (collapsed lung): | | | | Yes | No |
|--------|-----------------------------------|-----------|----------------|---------------|----------|-------------------------------------|
| | i. Lung cancer: | | | | Yes | No |
| | j. Broken ribs: | | | | Yes | No |
| | k. Any chest injuries or | surgeri | es: | | Yes | No |
| | I. Any other lung proble | em that y | you've been t | old about: | Yes | No |
| 13. Do | you currently have any | of the fo | llowing symp | otoms of pul | monary | or lung illness? |
| | a. Shortness of breath: | : | Yes No | | | |
| | b. Shortness of breath | when w | alking fast or | n level grour | nd or wa | alking up a slight hill or incline: |
| | Yes No | | | | | |
| | c. Shortness of breath | when w | alking with ot | her people a | at an or | dinary pace on level ground: |
| | Yes No | | | | | |
| | d. Have to stop for bre | ath whe | n walking at y | your own pa | ce on le | evel ground: |
| | Yes No | | | | | |
| | e. Shortness of breath | when w | ashing or dre | essing yours | elf: | |
| | Yes No | | | | | |
| | f. Shortness of breath | that inte | rferes with yo | our job: | | |
| | Yes No | | | | | |
| | g. Coughing that produ | ices phle | egm (thick sp | outum): | | |
| | Yes No | | | | | |
| | h. Coughing that wake | s you ea | arly in the mo | rning: | | |
| | Yes No | | | | | |
| | i. Coughing that occurs | s mostly | when you ar | e lying dowr | า: | |
| | Yes No | | | | | |
| | j. Coughing up blood ir | the las | t month: | | | |
| | Yes No | | | | | |
| | k. Wheezing: | | | Yes | No | |
| | I. Wheezing that interfe | eres with | your job: | Yes | No | |
| | m. Chest pain when yo | ou breath | ne deeply: | Yes | No | |
| | n. Any other symptoms | s that yo | u think may b | oe related to | lung p | roblems: |
| | Yes No | | | | | |
| 14. Ha | ive you ever had any of | the follo | wing cardiova | ascular or he | eart pro | blems? |
| | a. Heart attack: | Yes | No | | | |
| | b. Stroke: | Yes | No | | | |
| | c. Angina: | Yes | No | | | |
| | d. Heart failure: | Yes | No | | | |
| | | | | | | |

e. Swelling in your legs or feet (not caused by walking): Yes

No

RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

| | f. Hear | t arrhythmia (heart beatin | g irregu | ılarly): | | Yes | No | | |
|-----------|-----------|---|----------------|----------------|-------------|----------|------------|-----------|-----------------|
| | g. High | High blood pressure: | | | | Yes | No | | |
| | h. Any | Any other heart problem that you've been told about: | | | | Yes | No | | |
| 15. Ha | ve you | ever had any of the follow | ing card | diovascu | lar or hea | art syn | nptoms? | | |
| | a. Fred | quent pain or tightness in | your ch | est: | | | | | |
| | Yes | No | | | | | | | |
| | b. Pair | or tightness in your ches | t during | physica | al activity | : | | | |
| | Yes | No | | | | | | | |
| | c. Pair | or tightness in your ches | t that in | terferes | with you | r job: | | | |
| | Yes | No | | | | | | | |
| | d. In th | ne past two years, have yo | ou notic | ed your | heart ski | pping (| or missing | g a beat | t:: |
| | Yes | No | | | | | | | |
| | e. Hea | rtburn or indigestion that | is not re | elated to | eating: | | | | |
| | Yes | No | | | | | | | |
| | f. Any | other symptoms that you | think m | ay be re | lated to a | heart | or circula | tion pro | blem: |
| | Yes | No | | | | | | | |
| 16. Do | you cui | rently take medication for | any of | the follo | wing pro | blems? | • | | |
| | a. Brea | athing or lung problems: | Yes | No | | | | | |
| | b. Hea | rt trouble: | Yes | No | | | | | |
| | c. Bloc | od pressure: | Yes | No | | | | | |
| | d. Seiz | zures (fits): | Yes | No | | | | | |
| 17. If y | ou've u | sed a respirator, have yoι | ı ever h | ad any o | of the fol | lowing | problems | ? (If you | u've never |
| use | ed a res | pirator, initial here | | and | d procee | d to qu | estion 19 |): | |
| | a. Eye | irritation: | | Yes | No | | | | |
| | b. Skir | allergies or rashes: | | Yes | No | | | | |
| | c. Anx | iety: | | Yes | No | | | | |
| | d. Ger | eral weakness or fatigue: | • | Yes | No | | | | |
| | e. Any | other problem that interfe | eres wit | h your u | se of a | espirat | or: | Yes | No |
| | | like to talk to the health on this questionnaire: | are pro Yes | fessiona No | al who wi | ll revie | w this qu | estionna | aire about your |
| full-face | e respira | hrough 24 must be answe ator or a self-contained br e other types of respirator | eathing | appara | tus (SCB | A). Fo | r employe | ees who | |
| 19. Ha | ve you | ever lost vision in either e | ye (tem | porarily | or perm | anently | ·): | Yes | No |
| 20. Do | you cu | rrently have any of the fol | lowing | vision pr | oblems? | | | | |
| | a. Wea | ar contact lenses: | | Yes | No | | | | |

RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

b. Wear glasses: Yes No c. Color blind: Yes No

e. Any other eye or vision problem: Yes No

21. Have you ever had an injury to your ears, including a broken eardrum:

Yes

No

22. Do you currently have any of the following hearing problems?

a. Difficulty hearing: Yes

b. Wear a hearing aid:

Yes No

No

c. Any other hearing or ear problem: Yes No

23. Have you ever had a back injury: Yes No

24. Do you currently have any of the following musculoskeletal problems?

a. Weakness in any of your arms, hands, legs, or feet: Yes No

b. Back pain: Yes No

c. Difficulty fully moving your arms and legs:

Yes No

d. Pain or stiffness when you lean forward or backward at the waist: Yes No

e. Difficulty fully moving your head up or down:

Yes No

f. Difficulty fully moving your head side to side:

Yes No

g. Difficulty bending at your knees:

Yes No

h. Difficulty squatting to the ground:

Yes No

i. Climbing a flight of stairs or a ladder carrying more than 25 lbs.: Yes No

j. Any other muscle or skeletal problem that interferes with using a respirator: Yes No

RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

The department supervisor or RPA must complete and submit the following to the Center for all participating employees.

| 1) What type of respirator will be use | d by the employee?: | |
|--|-------------------------|--|
| Туре | | |
| (name) | | |
| Style (Circle): Full or Half or Paper | or SCBA or PAPR of | or |
| Other | - | |
| Weight:lbs. | | |
| 2) What will the duration and frequen | cy of respirator use be | (including use for rescue and escape)? |
| Days per month: < 5 or > 5. | | |
| Time per usage:minutes | s per usage, or | hours per usage. |
| Usage location: Indoor or Outdoor of | or Both | |
| 3) What is the anticipated physical w | ork effort?: | |
| Non-manual, Light or Some manual. | Medium or > half mar | nual, <i>Heavy</i> : |
| 4) Additional protective clothing and | equipment to be worn: | |
| List: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Supervisor's or RPA Signature | Department | Dat |

SUPPLEMENTAL RESPIRATOR USE FORM **MEDICAL QUESTIONNAIRE**

Part B:

1. In your present job, are you working at high altitudes (> 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other

| symptoms when you're working under these conditions: Yes No | | | | | | | |
|---|--|--|--|--|--|--|--|
| 2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes No | | | | | | | |
| If "yes," name the chemicals (if known): | | | | | | | |
| 3. Have you ever worked with any of the materials, or under any of the conditions, listed below: | | | | | | | |
| a. Asbestos: Yes No b. Silica (e.g., in sandblasting): Yes No c. Tungsten/cobalt (e.g., grinding or welding this material): Yes No d. Beryllium: Yes No e. Aluminum: Yes No f. Coal (for example, mining): Yes No g. Iron: Yes No h. Tin: Yes No i. Dusty environments: Yes No j. Any other hazardous exposures: Yes No If "yes," describe these exposures: | | | | | | | |
| 4. List any second jobs or side businesses you have: | | | | | | | |
| 5. List your previous occupations: | | | | | | | |
| 6. List your current and previous hobbies: | | | | | | | |
| 7. Have you served in the military? Yes No | | | | | | | |
| If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes No | | | | | | | |
| 8. Have you ever worked on a HAZMAT team? Yes No | | | | | | | |
| Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes No If "yes," name the medications (if known): | | | | | | | |
| 10. Will you be using any of the following items with your respirator(s)? a. HEPA Filters: Yes No b. Canisters (for example, gas masks): Yes No c. Cartridges: Yes No | | | | | | | |
| 11. How often are you expected to use the respirator(s) (circle all that apply)?: | | | | | | | |
| a. Escape only (no rescue): Yes No | | | | | | | |

b. Emergency rescue only: Yes No c. Less than 5 hours per week: Yes

SUPPLEMENTAL RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

| Duration of exposure per shift: |
|---|
| Estimated maximum exposure level per shift:hours. |
| Name of the first toxic substance: |
| 18. Provide the following information, if known, for each toxic substance that you'll be exposed while using your respirator(s): |
| |
| respirator(s) (for example, confined spaces, life-threatening gases): |
| 17. Describe any special or hazardous conditions you might encounter when you're using your |
| 14. Will you be working under hot conditions (temperature > 77 deg. F): Yes No 15. Will you be working under humid conditions: Yes No 16. Describe the work you'll be doing while you're using your respirator(s): |
| 13. Will you be wearing additional protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes No If "yes," describe this protective clothing and/or equipment: |
| If "yes," how long does this period last during the average shift:hrsmins. Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.). |
| c. Heavy (above 350 kcal per hour): Yes No |
| shift:hrsmins. Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface. |
| b. Moderate (200 to 350 kcal per hour): Yes No If "yes," how long does this period last during the average |
| If "yes," how long does this period last during the average shift:hrsmins. Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines. |
| 12. During the period you are using the respirator(s), is your work effort: a. Light (< 200 kcal per hour): Yes No |
| e. 2 to 4 hours per day: Yes No f. Over 4 hours per day: Yes No |
| d. Less than 2 hours per day: Yes No |

SUPPLEMENTAL RESPIRATOR USE FORM MEDICAL QUESTIONNAIRE

| Name of the second toxic substance: |
|---|
| Estimated maximum exposure level per shift: |
| Duration of exposure per shift: |
| Name of the third toxic substance: |
| Estimated maximum exposure level per shift: |
| Duration of exposure per shift: |
| The name of any other toxic substances that you'll be exposed to while using your respirator: |
| 19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security): |
| |